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PTOL-90A (Rev. 04/07)

# BEFORE THE BOARD OF PATENT APPEALS
## AND INTERFERENCES

Application Number: 09/785,385
Filing Date: February 16, 2001
Appellant(s): JACOBUS, CHARLES  J.

John G. Posa, Reg. No. 37, 424
_For Appellant_

## EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/12/2010 appealing from the Office action mailed

3/12/2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by

name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's decision in

the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-23 are rejected and under appeal.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments

after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in

the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to

be reviewed on appeal. Every ground of rejection set forth in the Office action from which the

appeal is taken (as modified by any advisory actions) is being maintained by the examiner except

for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

REJECTIONS."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the

Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

| | | |
|---|---|---|
| **6015348** | **Lambright et al.** | **1/18/00** |
| **6185602** | ***Bayrakeri*** | **2/6/01** |
| **6463078** | ***Engstrom* et al.** | **10/8/02** |
| **6611872** | ***McCanne*** | **8/26/03** |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**I.     CLAIM REJECTIONS - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another
filed in the United States before the invention thereof by the applicant for patent, or on an

international application by another who has fulfilled the requirements of paragraphs (1),
(2), and (4) of section 371(c) of this title before the invention thereof by the applicant for
patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

### A.    Claims 1, 3, 4, 6-8, 10, 11, 14-20, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by *McCanne*, U.S. Patent No. 6.611.872.

**Claim 1**

*McCanne* discloses a distributed network computing environment, comprising:

a plurality of clients communicating within a multicast cloud distributed network

[column 2 «lines 12-17»] using content-specific data within messages to implement data routing

and message culling in a groupware application [column 2 «line 60» to column 3 «line 8»: using

application level data within the packet to control packet distribution | column 4 «lines 20-42»:

routers modified to implement routing based on application-specific packets]; and

one or more network routing modules or router-embedded applets operative, in addition

to normal packet-routing [column 4 «lines 60-65»: regular unicast routing], to permit or inhibit

the distribution of a particular message based upon the content of the message [column 2 «line

60» to column 3 «line 8»].

**Claim 3**

*McCanne* discloses the environment of claim 1, wherein the application is a client-selectable and controllable data service associated with the distribution of audio, video, or other digital signal streams [column 2 «lines 25-31»: digital audio, video/media applications].

**Claim 4**

*McCanne* discloses the environment of claim 1, wherein the clients enter, leave, and interact with the cloud through a lobby manager [column 9 «lines 24-42»: *McCanne*'s designated router reads on the lobby manager. The designated router receives requests to join the multicast group | column 17 «lines 35-43»: using leave messages to leave the multicast group].

**Claim 6**

*McCanne* discloses the environment of claim 4, wherein the lobby manager is further operative to simultaneously support multiple clouds through multicast or replicated unicast protocols [column 2 «lines 45-49»: joining disjoint and isolated multicast clouds].

**Claim 7**

*McCanne* discloses the environment of claim 1, wherein the routing modules implement application-specific message culling to reduce client-cloud communications [column 2 «line 60» to column 3 «line 8»: MediaBridge intelligently filtering flows so that they fit onto a link when there is extra high-bandwidth video flows arriving at a choke point].

**Claims 8 and 20**

*McCanne* discloses the environment of claim 7, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications [column 2 «line 60» to column 3 «line 8» | column 26 «lines 53-56»].

**Claim 10**

*McCanne* discloses the application is a massive groupware application involving

thousands of world-wide participants [column 1 «lines 29-46»: *McCanne*'s invention directed at

delivering media information to "massive numbers of end-users at once"].

**Claim 11**

*McCanne* discloses a distributed network computing environment, comprising:

a network-enabled client application [Fig. 2: client];

at least one lobby manager that facilitates communications between the client application

and a federation [column 9 «lines 24-42»: *McCanne*'s designated router reads on the lobby

manager. The designated router receives requests to join the multicast group]; and

one or more network routing modules or router-embedded applets operative, in addition

to normal packet-routing, to permit or inhibit the distribution of a particular message based upon

the content of the message to reduce the communications with the federation [column 4 «lines

60-65»: regular unicast routing], to permit or inhibit the distribution of a particular message

based upon the content of the message [column 2 «line 60» to column 3 «line 8» | column 19

«lines 54-59» | column 28 «line 54» to column 29 «line 3»].

**Claims 14 and 15**

*McCanne* discloses the environment of claim 11, wherein the application is a client

selectable and controllable data service [column 2 «lines 25-31»: digital audio, video/media

applications], wherein the data service includes audio, video, or other type of digital signal feed

[column 2 «lines 25-31»].

**Claim 16**

*McCanne* discloses the environment of claim 11, wherein the routing modules further

support a point-to-multipoint distributed communications model between clients [abstract:

multicast].

**Claim 17**

*McCanne* discloses the environment of claim 11, wherein: at least some of the client

applications run on host platforms [column 5 «lines 20-22»: end hosts | column 6 «lines 11-14»];

and the routing modules further support conventional internet packet routing among the hosts

[column 4 «lines 60-65»: regular unicast routing].

**Claim 18**

*McCanne* discloses the environment of claim 11, wherein the routing modules further

support one or more conventional multicast protocols [abstract: multicast routing].

**Claims 22 and 23**

*McCanne* discloses the environment of claim 11, wherein the lobby manager is further

operative to simultaneously process multiple federations [column 2 «lines 45-49»: joining

disjoint and isolated multicast clouds], wherein the federations communicate through multicast

or replicated unicast protocols column 2 «lines 45-49»: joining disjoint and isolated multicast

clouds].

## II.    CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**A.     Claims 2, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *McCanne* in view of *Lambright* et al. (U.S. Patent Number 6,015,348), hereinafter referred to as *Lambright*.**

*Lambright* was previously cited by Applicant in the IDS filed on 7/22/2004.

**Claims 2, 12, and 13**

*McCanne* does not expressly disclose that the application is a distributed simulation or game. However, *McCanne* does disclose an application as a multi-user digital audio/video/media application operating in a distributed manner across heterogeneous networks [column 2 «lines 25-31»]. Like *McCanne*, *Lambright* also discloses a multi-user digital media application but *Lambright* further disclose this application is a game that can be implemented for thousands of participants [column 1 «lines 14-33»].

Since the inventions of *McCanne* and *Lambright* encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify *McCanne*'s multi-user digital video/audio application by adding the use of an application which was a simulation or game and the ability to reach thousands of participants as provided by *Lambright*. This would make sense because it would be an ideal utilization of the network for a different purpose, specifically online gaming. *See MPEP § 2143*.

**B.      Claims 5 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McCanne* in view of *Engstrom* et al, U.S. Patent No. 6.463.078 ["*Engstrom*"].**

*McCanne* does not expressly disclose that the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Engstrom*.

Like *McCanne*, *Engstrom* is directed to a multi-user digital media application. *Engstrom* discloses a multi-user video game that includes a lobby manager wherein the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies [column 16 «lines 1-20»: lobby manager used to determine compatible applications and to download specific parameters to insure compatibility].

It would have been obvious to one of ordinary skill in the art to have modified *McCanne* to include the functionality of *Engstrom*'s lobby manager. Such a modification is an example of using a known technique [*Engstrom*'s lobby manager checks for compatible applications on user computers] to improve similar system [*McCanne*'s multi-user digital media application] in the same way [*McCanne*'s system improved because application with different versions may still communicate with one another]. *See MPEP § 2143*.

**C.      Claims 9 and 19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over *McCanne* in view of *Bayrakeri*, U.S. Patent No. 6.185.602.**

*McCanne* does not expressly disclose the application communicates internal state changes into the cloud or federation through an API. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by *Bayrakeri*. Like *McCanne*, *Bayrakeri* is directed to a system of multi-user interaction for multimedia communication [Fig. 4

«item 412» | column 2 «lines 14-22»]. *Bayrakeri* further discloses an application communicating

internal state changes into a multicast cloud through an API [column 6 «lines 52-65»].

It would have been obvious to one of ordinary skill in the art to have modified

*McCanne*'s system to include *Bayrakeri*'s API for communicating state changes through a

multicast network. Such a modification is an example of using a known technique [*Bayrakeri*'s

API for using multicast to communicate state changes between devices] to improve similar

systems (*McCanne*'s multicast overlay network) in the same way [*McCanne*'s network modified

to include the messaging API so that devices can keep each other updated as to their states]. *See*

*MPEP § 2143.*

### (10) Response to Argument

**A.      With respect to the rejection of claims 1, 3, 4, 6-8, 10, 14-20, 22, and 23, Appellant's arguments should not be found persuasive because *McCanne* discloses content-based routing.**

Appellant argues that *McCanne* does not disclose routing based upon the content of the

message. The phrase "routing based upon the content of the message" is deceiving because the

specific claim language is "to permit or inhibit the distribution of a particular message based

upon the content of the message." While content-based routing implies that the destination or

next-hop of the packet is determined based upon the content, the actual claim language merely

requires a decision as to whether to allow the distribution of the message.

*McCanne* discloses at least examples of permitting or inhibiting distribution based upon

content of the message. For example, *McCanne* discloses a situation where a router only

forwards (i.e., permits or inhibits) a packet "if it arrives from one of its peers" by looking at the

"peer's IP address [which] appears explicitly *in the packet*." Col. 19, ll. 54-59 (emphasis added).

Stating that the peer's IP address is "in the packet" is a clear indicator that the IP's address is part

of the content of the packet. Therefore, the routing is based on the content of the packet.

Moreover, *McCanne* considers the IP address to be content in specifying that a "*content-aware*

redirection server can be used to map an IP address, for instance, to a nearby overlay router."

Col. 14., ll. 6-8 (emphasis added).

 *McCanne* also discloses that the purpose of his invention is to extend routers "with

application-level knowledge to carry out semantically-aware transformations conditioned on

bandwidth constraints specified by external policies." Col. 4, l. 66 to col. 5, l. 3. In further

explaining this feature, *McCanne* discloses a MediaBridge that "can make decisions as to

whether, and where to route the packets." Col. 28, ll. 54-55. These decisions include "a control

mechanism for restricting, managing, or modifying the relayed information." Col. 28, ll. 57-58.

 One example of this control mechanism is the ability of the MediaBridge to determine

whether bandwidth requirements of streaming the content would be too high and then taking

restricting the bandwidth of streaming content by "reducing the image size, resolution, frame

rate, color depth." Col. 29, ll. 5-7. The MediaBridge must look to the content of the streaming

content to determine its original image size, resolution, etc., in order to determine whether or not

to permit distribution of the content.

 In other words, the MediaBridge would inhibit the distribution of the streaming content

unless its contents were modified consistent application-specific bandwidth policies. By basing

its decision on the content (i.e., content's image size, resolution, frame rate, color depth),

*McCanne*'s MediaBridge performs the limitation as claimed.

> **B.     With respect to claim 11, *McCanne*'s designated router reads on the claimed lobby manager.**

The claimed lobby manager facilitates communications between the client application and a federation. Appellant's specification describes a federation as a "communication cloud." Abstract. Similarly, *McCanne* discloses a multicast cloud. Fig. 2 and col. 3, ll. 61-64. As seen in figure 2, *McCanne* discloses an overlay router that facilitates communication between a client and the multicast cloud (i.e., transit domain). Col. 8, ll. 53-61. This router reads on the claimed lobby manager.

> **C.     With respect to claim 2, the reason to combine the references comes from the references and knowledge well known in the art at the time of Appellant's invention.**

Appellant argues that there is no reason to combine *McCanne* and Lambright. The claim limitation recites that the claimed application is a distributed simulation or a game. *McCanne* and Lambright are both directed to similar inventions. *McCanne* discloses an application that is a multi-user digital audio/video/media application operating in a distributed manner. Col. 2, ll. 25-31. Similarly, Lambright discloses a multi-user digital media application operating in a distributed manager but further discloses that the application is a game that can be implemented for thousands of participants.

Therefore, it would have been obvious to one of ordinary skill in the art to have implemented *McCanne*'s multi-user media application as a multi-user media gaming application as taught in Lambright. Such an a modification to *McCanne*'s system is merely an example of simple substitution of one known element (*McCanne*'s multi-user media application) for another (Lambright's multi-user media game application) to obtain predictable results. *See* MPEP § 2143.

**D.      With respect to claims 5 and 21, the examiner did articulate the necessary findings for combining *McCanne* and *Engstrom*.**

*McCanne* did not expressly disclose a lobby manager that validated the client application for compatibility with the federation and download data to correct deficiencies. The rejection relied on *Engstrom* to teach this feature. Specifically, *Engstrom* disclosed a multi-user digital media application communicating with a lobby manager wherein the manager determines compatible applications and downloads parameters to insure compatibility. Col. 16, ll. 1-20.

It would have been obvious to modify *McCanne*'s multi-user system to include *Engstrom*'s lobby manager. Such a modification is an example of using a known technique [*Engstrom*'s lobby manager checks for compatible applications on user computers] to improve similar system [*McCanne*'s multi-user digital media application] in the same way [*McCanne*'s system improved because application with different versions may still communicate with one another].

In other words, *McCanne*'s system is the "base" system. *Engstrom*'s system comprising a lobby manager and related functionality is the comparable system that improves *McCanne*'s system by inclusion of a lobby manager. *Engstrom* discloses that his lobby manager performs compatibility checks to insure that applications may still communicate with one another. This improvement represents the motivation to include *Engstrom*'s lobby manager into *McCanne*'s system.

**E.      With respect to claims 9 and 19, the examiner did articulate the necessary findings for combining *McCanne* and *Bayrakeri*.**

*McCanne* does not expressly disclose the application communicates internal state changes into the cloud or federation through an API. Like *McCanne*, *Bayrakeri* is directed to a

system of multi-user interaction for multimedia communication [Fig. 4 «item 412» | column 2 «lines 14-22»]. *Bayrakeri* further discloses an application communicating internal state changes into a multicast cloud through an API [column 6 «lines 52-65»].

It would have been obvious to one of ordinary skill in the art to have modified *McCanne*'s system to include *Bayrakeri*'s API for communicating state changes through a multicast network. Such a modification is an example of using a known technique [*Bayrakeri*'s API for using multicast to communicate state changes between devices] to improve similar systems (*McCanne*'s multicast overlay network) in the same way [*McCanne*'s network modified to include the messaging API so that devices can keep each other updated as to their states]. *See MPEP § 2143.*

In other words, *McCanne*'s system is the "base" system. *Bayrakeri*'s system comprising an API that communicates state changes into a cloud is the comparable system that improves *McCanne*'s system by inclusion of an API. Since *Bayrakeri*'s API allows for devices to communicate states changes to other devices, this improvement represents the motivation to include *Bayrakeri*'s API into *McCanne*'s system.

### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/DOHM  CHANKONG/
Primary Examiner, Art Unit 2452
9/21/2010

Conferees:

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